

SAVITSKAYA, E.K.

F-4

USSR/Microbiology - Medical and Veterinary.

Abs Jour : Ref Zhur - Biologiya, No 7, 1957, 26406

Author : Ishchenko-Linnik, K.M., Khotimaskaya, B.Z., Parkhomenko, L.I., Savitskaya, E.K.

Inst : Kharkov Scientific Research Institute of Vaccines and Sera

Title : The Etiological Structure of Dysentery

Orig Pub : Sb. tr. Kahr'kovsk. n.-i. in-ta vaktsin i syvorotok, 1955, 22, 7-12

Abst : Studies conducted in 1948-1952 revealed the growth of implantability of dysentery bacteria among dysentery patients, convalescents, and exposed individuals. In 1950-1952, Grigoryev-Shig bacteria were entirely absent, while the proportion of Sonne bacteria increased from 2% in 1948 to 23% in 1952. The proportion of Flexner bacteria fell from 86.3% in 1948 to 59.2-68% in 1952. The type distribution among Flexner bacteria

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USSR/Microbiology - Medical and Veterinary.

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Abs Jour : Ref Zhur - Biologiya, No 7, 1957, 26406

showed no changes, and V and W serotypes predominated. An increase in the implantability of Newcastle bacteria is noted. A decrease in the implantability of Flexner bacteria in summer and autumn months is noted, accompanied by a growth of the transmissibility of Sonne bacteria. Chronic dysentery patients give evidence of Sonne bacteria 3 times less frequently than acute cases. This fact suggests a dominant role of Flexner bacteria in the development of acute forms.

Card 2/2

KROL', B.B.; ROZHDESTVENSKAYA, A.A.; KUCHERYAVAYA, N.N.. Prinimali uchastie: SAVITSKAYA, G.A.

Studying the sulfur compounds in transformer oil. Khim. i tekhn. topl. i masel 9 no.5:39-43 5 My'64 (MIRA 17:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke nefiti i gaza i polucheniye iskusstvennogo zhidkogo topliva (for all except Savitskaya).

TSEDRİK, Mikhail Semenovich, kand. fiz.-mat. nauk, dots.; BIRICH,  
Yevgeniya Vasil'yevna; MAKEYEVA, Galina Pavlovna;  
SAVITSKAYA, Inessa Fedorovna; VEREVKINA, N.M., red.;  
MOLCHANOVA, A.K., red.

[Graphs in physics] Fizika v grafikakh. [By] K.S.TSedrik  
i dr. Minsk, Vysshaia shkola, 1964. 258 p.  
(MIRA 17:6)

SOV/32-25-6-2/53

5(4)

AUTHORS:

Savitskaya, I. S., Songina, O. A.

TITLE:

On the Characteristic Features of the Method of Amperometric Titration With Two Indicator Electrodes (Ob osobennostyakh metoda amperometricheskogo titrovaniya s dvumya indikatornymi elektrodami)

PERIODICAL:

Zavodskaya Laboratoriya, 1959, Vol 25, Nr 6, pp 647 - 653 (USSR)

ABSTRACT:

The present paper gives a description of the new method, that had been already suggested earlier (Ref 1), of the electro-metric determination of the titration end, which has been applied only recently to a greater extent abroad. Data from publications are mentioned (Ref 2) and own experimental results are given. To solve the problem of the choice of the appropriate electromotive force (emf), and also to determine the cases in which the new method may be applied, experiments were made in an appropriate system with two platinum electrodes (Fig 1, Scheme), and compared, on the basis of the usual titration method, with an indicator electrode (Table 2). The results obtained in the titration of ferrocyanide with permanganate in a 1 n sulphuric acid are shown (Figs 3,4,5, titration curves), and it was found that the amperometric titration with two

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On the Characteristic Features of the Method of  
Amperometric Titration With Two Indicator Electrodes

SOV/32-25-6-2/53

electrodes is on principle possible if the electrode process (by which a branch of the titration curve is caused) proceeds with an emf which is lower than the decomposition voltage of the background. A description is then given of the principle of zinc- and thorium titration (Refs 13,14) with ferrocyanide by precipitation, and it is stated that the principal criterion for the choice of the emf applied to the electrodes lies in the degree of reversibility of the system, occurring in the titration. The choice of the emf must proceed from the volt-ampere curves of those substances taking part in the titration or serving as background. This is shown for some systems (Table 1), and it is stated that in this way the course of the titration curve may be pre-determined. There are 6 figures, 2 tables, and 16 references, 3 of which are Soviet.

ASSOCIATION: Kazakhskiy gosudarstvennyy pedagogicheskiy institut (Kazakh State Pedagogical Institute)

Card 2/2

5(2)

AUTHORS:

Songina, O. A., Savitskaya, I. S.

SOV/32-25-9-2/53

TITLE:

On the Peculiarities of Some Methods of Electrometric Titration

PERIODICAL:

Zavodskaya laboratoriya, 1959, Vol 25, Nr 9, pp 1028-1033 (USSR)

ABSTRACT:

The characteristic peculiarities of the various most propagated electrometric titration methods and their variants are explained and some connections are pointed out. The main factors characterizing the methods concerned are compared. Problems of polarographic and amperometric titration are discussed among others, and the "potentiometric titration under current" (Ref 2) is explained. "Potentiometric titration methods with two electrodes at constant current intensity" are then mentioned and discussed with examples. The method (Ref 11) of the "dead stop end point" is given, and it is then ascertained that, contrary to reference 12 the conductometric titration differs in principle from the amperometric titration. The conductometric titration methods are not suitable for selective determinations, which is also true for the modern, modified conductometric

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On the Peculiarities of Some Methods of Electrometric Titration SOV/32-25-9-2/53

titration - the so-called "high frequency titration". The potentiometric and amperometric titration methods with one and two indicator electrodes are compared in a table, and a basic scheme of the apparatus used in these titrations is given (Fig 4). There are 4 figures, 1 table, and 13 references, 4 of which are Soviet.

ASSOCIATION: Kazakhskiy gosudarstvennyy universitet (Kazakh State University)

Card 2/2

SAVITSKAYA, I.S.; SONGINA, O.A.

Amperometric titration With two indicator electrodes (dead stop end point); survey. Zav.lab. 26 no.3:282-287 '60. (MIRA 13:6)  
(conductometric analysis)

SONGINA, O.A.; SAVITSKAYA, I.S.

Effect of the dimensions of cathode and anode on the shape of a curve in amperometric titration with two indicator electrodes. Zav.lab. 27 no.9:1068-1074 '61. (MIRA 14:9)

1. Kazakhskiy gosudarstvennyy universitet i Bashkirskiy gosudarstvennyy universitet.  
(Conductometric analysis)

SONGINA, O.A.; SAVITSKAYA, I.S.

Determination of  $V^{4+}$  and  $V^{5+}$  by the method of amperometric titration  
with two indicator electrodes. Zav.lab. 29 no.4:401-402 '63.  
(MIRA 16:5)

1. Kazakhskiy gosudarstvennyy universitet im. S.M.Kirova.  
(Vanadium—Analysis) (Conductometric analysis)

SENCHINA, O.A.; SAVITSKAYA, I.S.

Effect of impurities in the determination of zinc by the ferrocyanide amperometric method with two indicator electrodes.  
Zav. lab. 31 no.3:259-262 '65. (RITA 18:12)

1. Kazakhskiy gosudarstvennyy universitet im. S.M. Kairata.

PRINOVSKIY, V.S.,; SAVITSKAYA, L.K.

Surgical treatment of vesicovaginal fistulas. Akush. i gin. 32  
no.1:46-51 Ja-F '56 (MIRA 9:6)

1. Iz Nauchno-issledovatel'skogo instituta akusherstva i ginekologii  
(dir.L.G. Stepanov) Ministerstva zdravookhraneniya SSSR.  
(FISTULA, VESICOVAGINAL, surg.)

SAVITSKAYA, L.K.

Surgical treatment of external endometriosis. Akush.i gin. 35  
no.5:52-57 S-O '59. (MIRA 13:2)

1. Iz otdeleniya operativnoy ginekologii (zaveduyushchiy - prof.  
V.S. Frinovskiy) Instituta akusherstva i ginekologii (direktor -  
dotsent L.G. Stepanov) Ministerstva zdravookhraneniya RSFSR.  
(ENDOMETRIOSIS, surgery)

SAVITSKAYA, L. K., Cand Med Sci -- "External endometriosis.  
(Clinical diagnosis and surgical <sup>treatment</sup> therapy)." Mos, 1961.  
(First Mos Order of Lenin Med Inst im I. M. Sechenov)  
(KL, 3-61, 264)

- 514 -

3416  
S/139/61/000/0 6/016/023  
E073/E535

1.7300

AUTHORS:

Savitskaya, L.K. and Savintsev, P.A.

TITLE:

On the nature of contact fusion

PERIODICAL:

Izvestiya vysshikh uchebnykh zavedeniy, Fizika, no.6,  
1961, 126-131

TEXT:

The aim of the author was to investigate the following two points during the process of contact melting:  
a) whether after some liquid has formed, pure metals are being dissolved or whether the surface contains some layer in which solid solutions form before this layer becomes molten;  
b) whether the process of contact melting changes if instead of pure metals being in contact with each other, the contact is between a solid solution and a pure metal.  
For this purpose the fusion rate at various temperature of solid solutions of bismuth in tin in contact with bismuth and the fusion rate of pure bismuth in contact with tin-base alloys containing additions of bismuth were studied. Furthermore, the width of the region with variable concentrations of the components at the boundary between the solid crystal and the liquid was

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On the nature of contact fusion

S/139/61/000/J06/016/025  
E073/E535

investigated. The wide range of solubility in the solid state of this system permits varying within wide limits the concentration of the solid solution and studying the nature of the dependence of the process of contact fusion on concentration. Tin-base alloys containing 1, 5.5, 8.5, 17 and 19 wt.% of bismuth were used in the experiments. It was found that during the process of contact fusion of Sn with Bi a continuous series of solid solutions form at the surface of the tin which is bounding on the liquid. Preliminary introduction of the bismuth in the tin reduces the thickness of the surface layer on which solid solutions form. Preliminary solution of bismuth in tin within the limits of the solid solution leads to an acceleration of the fusion of the tin which is in contact with the bismuth; there is an increase in the rate of contact fusion with increasing concentration of the solid solution. Alloys of tin and bismuth, which were in a two-phase state at the experimental temperatures, had a very high fusion rate when in contact with bismuth, which indicates that the liquid phase is of predominant importance during contact fusion. There are 3 figures and 11 references; 10 Soviet-bloc and 1 non-Soviet-bloc.

CA 6 475

On the nature of contact fusion

34156  
S/139/61/000/006/016/025  
EO73/E535

The English-language reference reads as follows: Ref. 9; James F. Lynch, Lester Feinstein, Robert A. Huggins. Welding Journal, No. 2, 97-101 (85S-89S), 1959.

ASSOCIATION: Tomskiy politekhnicheskii institut imeni S.M.Kirova  
(Tomsk Polytechnic Institute imeni S.M.Kirov)

SUBMITTED: April 3, 1961

Card 3/3

X

S/139/62/000/003/019/021  
E193/E585

AUTHORS: Berzina, I.G., Savitskaya, L.K. and Savintsev, P.A.

TITLE: A study of the structure of metals near the [liquid/  
/solid] interface during contact fusion

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Fizika,  
no. 3, 1962, 160 - 163 + 1 plate

TEXT: When two metals which form a eutectic are brought into intimate contact and heated to a temperature lower than the melting point of either metal, but higher than the eutectic temperature, a liquid phase is formed at the plane of contact. The object of the present investigation was to study the mechanism of this phenomenon. The experiments were conducted on Sn-Bi, Sn-Cd and Cd-Zn couples. Cylindrical specimens, prepared by drawing molten metals into glass tubes, were used with the contact surfaces made flat by polishing. The technique described by P.A. Savintsev and A.V. Vyatkina (Izv. vuzov SSSR, Chernaya metallurgiya, no. 2, 1959, 89) was used to bring about contact fusion, the holding temperatures of 150 and 280 °C being used for the Sn-Bi and Cd-Zn couples, respectively. Metallographic Card 1/2

A study of ....

S/159/62/000/003/019/021  
E193/E385

examination and measurements of microthermo-e.m.f. (in the plane normal to the plane of contact) were used to study the structural changes preceding and accompanying the formation of the liquid phase. Several conclusions were reached..

- 1) The formation of a liquid phase at the plane of contact of two solid metals A and B does not take place until a layer of a saturated solid solution (A in B and B in A) has been formed on each contact surface, further dissolution of A and B in the layer of the liquid phase being also preceded by the same process.
  - 2) The rate at which the liquid phase is formed is fastest in the grain-boundary regions.
  - 3) Contact fusion can be used to reveal the presence and to determine the density of dislocations in the grain-boundary regions.
- There are 7 figures.

ASSOCIATION: Tomskiy politekhnicheskii institut imeni S.M. Kirova (Tomsk Polytechnical Institute imeni S.M. Kirov)

SUBMITTED: December 27, 1961  
Card 2/2

SAVITSKAYA, L. K.

Calculating the rate of contact melting of eutectic systems.  
Izv. vys. ucheb. zav.; fiz. no.6:132-138 '62.  
(MIRA 16:1)

1. Tomskiy politekhnicheskoy institut imeni S. M. Kirova.

(Melting)

L 22509-65 EWT(m)/T/EWP(t)/EWP(b) IJP(c) JD/MLK

ACCESSION NR: AT4046814

S/0000/64/000/000/0044/0049

AUTHOR: Savitskiy, A. P.; Savitskaya, L. K.

TITLE: Effect of impurities on pore formation along the grain boundaries *f*

SOURCE: AN SSSR. Nauchnyy sovet po probleme zharoprochnykh splavov. Issledovaniya staley i splavov (Studies on steels and alloys). Moscow, Izd-vo Nauka, 1964, 44-49

TOPIC TAGS: grain boundary, pore formation, technical cadmium, cadmium impurity, cadmium hardness, cadmium quenching, cadmium annealing, vacancy diffusion, volume diffusion *21*

ABSTRACT: This paper is devoted to a clarification of the mechanism of pore formation along the grain boundaries of cadmium during repeated quenching, and to the effect of impurities on this process. Specially prepared technical cadmium was used for the samples; one half were tested after repeated quenching in water (1-30 times from 300C) the other half after annealing at 300C for one hour with slow cooling. The grain size, microscopic hardness, density and rate of contact melting were measured. Pores were clearly visible on the photomicrographs of the grain boundaries of technical cadmium after 10 quenching cycles. The mechanism of cadmium pore formation was found to be of the vacancy diffusion type. The increase in contact melting speed after the first quenching

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ACCESSION NR: AT4046814

gradually changed to a decrease during subsequent quenching. After 5 quenching cycles the speed was equal to its initial value for unquenched samples, and after 30 cycles it was decreased 50%. The grain boundaries not only did not promote the penetration of the liquid phase into the interior of the sample, but even retarded this process. A number of reasons are given for the decrease in the contact melting speed. A study of technical cadmium subjected to repeated quenching and subsequent high-temperature annealing indicated that the impurities found along the grain boundaries during quenching accumulate slowly, but with sufficient speed so that diffusion of the internal grains can be detected. It is evident that the clogging of pores occurs as the impurities leave the boundaries. As a result of this study, new experimental data were obtained which indicate that the pores along the grain boundaries arise by means of the volume diffusion of the excess vacancies and atomic impurities. In the absence of impurities, pores are not produced or at least their formation is strongly inhibited. "The authors thank M. B. Makogan for supplying the pure cadmium." Orig. art. has: 3 figures.

ASSOCIATION: None

SUBMITTED: 16Jun64

ENCL: 00

SUB CODE: MM

NO REF SOV: 019

OTHER: 012

Card 2/2

L 15795-65 EWT(m)/EWP(w)/EWA(d)/EWP(t)/EWP(b) IJP(c) JD  
 8/0126/64/017/006/0886/0891  
 ACCESSION NR: AP4042047

AUTHOR: Savitskiy, A. P.; Savitskaya, L. K.

TITLE: Investigation of pore formation in cadmium after repeated hardening

SOURCE: Fizika metallov i metallovedeniye, v. 17, no. 6, 1964, 886-891

TOPIC TAGS: Cd, porosity, vacancy diffusion, microhardness, dislocation loop, hardening

ABSTRACT: Although porosity which leads to cracking and intercrystalline failure during tensile tests has been the subject of numerous investigations, there is no unanimous theory on the nature of this imperfection. The authors undertook a study of porosity after repeated hardening of 3.5 mm diam. and 8 mm long Cd wire rod specimens. Six-hour annealing at 300 C was followed by furnace cooling, and repeated water quenching in cycles of 1 to 30 times. Density and microhardness were measured by standard methods. Boundary porosity was visible after the third hardening and density adversely affected. The authors attribute the boundary porosity to the diffusion of vacancies in the grain volume. They contend that the excessive number of vacancies which forms after each hardening affect the mechanical

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L 15795-65

ACCESSION NR: AP4042047

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properties of the cadmium grains. The increase in the grain microhardness of commercial Cd after repeated hardening may serve as an indication of an increased density of dislocation loops which form after the first hardening. Not all of these loops are dissolved because of the short holding period and repeated hardening enhances their density. Therefore, initially, microhardness increases continuously. After the hardening of zone molten 99.998% Cd pores were absent and changes in microhardness negligible. The energy of vacancy formation in commercial Cd was calculated from the magnitude of changes in density after hardening and amounted to 8.5 - 0.8 Kcal/g.mol. A comparison with literary data leads to the conclusion that the mechanism of pore formation as a result of repeated hardening is, indeed, due to vacancies. Orig. art. has: 3 figures.

ASSOCIATION: Sibirskiy fiziko-tekhnicheskii institut '(Siberian Physico-Technical Institute); Tomskiy politekhnicheskii institut im. S. M. Kirova (Tomsk Polytechnic Institute)

SUBMITTED: 25Mar63

ENCL: 00

SUB CODE: MM

NO REF SOV: 018

OTHER: 012

Card 2/2

ABDUSAMETOV, R.Kh.; SAVITSKAYA, L.N.

Gastric juice in the treatment of suppurative skin diseases.  
Zdrav. Kazakh. 21 no.2:37-40 '61. (MIRA 14:3)

1. Iz Semipalatinskogo meditsinskogo instituta.  
(SKIN—DISEASES) (GASTRIC JUICE—THERAPEUTIC USE)

S/026/61/000/009/002/003  
D051/D112

26975

15-8070

AUTHOR: Savitskaya, M.I., Candidate of Chemical Sciences (Kiyev)

TITLE: Polyacrylamide

PERIODICAL: Priroda, <sup>50</sup>no. 9, 1961, 93-94

TEXT: The author gives a brief survey of the production, characteristics, use, and possibilities of future application of polyacrylamide. In the USSR it was synthesized for the first time in 1957 by the Institut vysokomolekulyarnykh soyedineniy AN SSSR (Institute of High-molecular Compounds of the Academy of Sciences USSR). Its production is based on the effect of 84.5% sulphuric acid on acrylonitrile at 100-110°C for 2 hours, a process resulting, due to the saponification of acrylonitrile, in the formation of acrylamide and acrylic acid. Acrylamide is usually polymerized in an oxidation-reduction medium at 50-60°C for 10-12 hours. The molecular weight of the polymer is  $5-6 \times 10^6$ . In solvents such as distilled water and formamide its molecules are ball-shaped. The study of the solutions showed that polyacrylamide acts as a polyelectrolyte due to partial hydrolysis of its amide groups. Several institutes have tested polyacrylamide

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Polyacrylamide

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D051/D112

as a coagulant. All tests gave positive results. In the USSR it is now produced on an industrial scale and, though being in reality a copolymer with an admixture of calcium acrylate, it is not less soluble than laboratory polyacrylamide and is a very efficient coagulant in industrial concentration, filtration, and precipitation processes in media with a pH from 3 to 9. In the potassium industry it has replaced starch, whose efficiency it exceeds by 20 times. Tests on river water samples, consisting in adding small amounts of polyacrylamide to the water, showed that the polymer quickly settles suspended mud particles. This can be of great importance for the purification of sewage water. A further characteristic of the polymer is growing activity on heating up to 80°C. The author explains the coagulative activity of the polymer in suspensions by its polyelectrolytic properties, which reduce the electrokinetic potential of the particles. Since 1957, on the suggestion of P.V. Vershinin, the Institute of High-molecular Compounds of the AS USSR has carried out tests with polymers as soil conditioners. Polyacrylamide proved to be the best. It is particularly efficient on heavy clayey soils, e.g. in the agricultural district near Leningrad. In an experimental hothouse of the Leningradskiy teplichnyy kombinat (Leningrad Hothouse Combine) polyacrylamide was used for growing tomatoes.

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Polyacrylamide

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D051/D112

The introduction of 10 g of this polymer per  $1\text{ m}^2$  resulted in a crop increase of 24%. Work carried out by the polymer section of the Ukrainskiy nauchno-issledovatel'skiy institut fiziologii rasteniy (Ukrainian Scientific Research Institute of Plant Physiology) showed that polyacrylamide can be introduced into the soil together with fertilizers. Polyacrylamide sprayed on granulated fertilizer (sulfite nitrophoska) also reduces the acidity of the soil solution and promotes growth of seeds (winter wheat). Research in this field is being continued. Polyacrylamide applied to quick-sands gave good results. The solid filmy layer forming on the sand surface is porous and permits the development of seeds. The roots of the plants still further stabilize the sands. The author considers that in the future polyacrylamide may be of great use in the textile industry. Positively charged polyacrylamide derivatives may be absorbed by negatively charged cellulose fibers, a property which can be successfully used for the processing of cloth. Russian soil scientists V.V. Dokuchayev, V.R. Vil'yams, and P.A. Kostychev are mentioned for their work in establishing the connection between the fertility of soils and their structures. ✓

Card 3/3

KOTON, M.M.; SOKOLOVA, T.A.; SAVITSKAYA, M.N.; KISELEVA, T.M.

Synthesis of N-substituted methacrylamides. Part 3: N-alkylacryl-  
and N-alkylmethacrylamides. Zhur. ob. khim. 27 no.8:2239-2243 1g  
'57. (MLRA 10:9)

1. Institut vysokomolekulyarnykh soyedineniy Akademii nauk SSSR.  
(Methacrylamide)

SRUITSKAYA M. N.

AUTHORS: Koton, E. M., Sokolova, T. A., Savitskaya, M. N., 79-2-30/64  
Kiseleva, T. M.

TITLE: Cases of Polymerization Inhibition of the Monomers From the Aryl-methacrylate Series (Sluchai zatrudnennoy polimerizatsii monomerov ryada arilmetakrilatov).

PERIODICAL: Zhurnal Obshchey Khimii, 1958, Vol. 28, Nr 2, pp. 417-421 (USSR).

ABSTRACT: In the polymerization of arylmethacrylates it was found that the aryl-methacrylates, which in the phenyl radical have the substituends in the ortho-position to the acyl radical, polymerize much more slowly than the corresponding para-isomers, independently of the character of the substituends. The polymerization conditions, the obtained results, as well as various methacrylates are shown in the table. The difference in the polymerization velocity between the methacryl ether of thymol and the methacryl ether of menthol is explained by the fact that the carbon atoms of the cyclohexane ring in the menthol ether are not arranged in one plane and thus the whole molecule is not as rigid as that of the thymol ether. In all given cases the polymerization inhibition can be explained by the screening effect of voluminous groups on the double binding. They disturb the access to the double binding of the free radicals of the benzoylperoxide which are volumi=

Card 1/2

Cases of Polymerization Inhibition of the Monomers From the Aryl- 79-2-30/64  
methacrylate Series.

nous, too. The experimental conditions as well as the properties of the monomers and polymerization data are given. Special data are given for the methacrylethers of p-cresol, guaiacol, p-metoxyphe-  
nol, o - oxybenzylphenyl, thymol, and menthol which hitherto have not yet been described in technical literature.  
There are 1 table, and 2 Slavic references.

ASSOCIATION: Institute for High-molecular Compounds AS USSR (Institut vysokomolekulyarnykh soyedineniy Akademii nauk SSSR).

SUBMITTED: January 11, 1957.

AVAILABLE: Library of Congress.

Card 2/2

AUTHORS: Savitskaya, M. I., Frenkel', S. Ya. 76-32-5-17/47

TITLE: The Fractional Composition and Some Hydrodynamic Properties of Polyphenylmethacrylamide (Fraktsionnyy sostav i nekotoryye gidrodinamicheskiye kharakteristiki polifenilmetakrilamida)

PERIODICAL: Zhurnal fizicheskoy khimii, 1958, Vol. 32, Nr 5, pp. 1063-1067 (USSR)

ABSTRACT: The investigation intended for the explanation of the influence of the relatively short chains on the brittleness of the above mentioned polymers showed that a wide distribution of the molecular weight with a maximum at 250000 is existing and that therefore the brittleness of the aryl derivatives of the N-substituted amides of metacrylic acid depends on the presence of strongly aromatic nuclei (benzene) in the side chains. From the mentioned experimental part can, among others, be seen that an oil centrifuge according to Svedberg (4000 revs./min) with an optical system according to Fil'pot-Svensson (Ref 5) was used, that the diffusion coefficient was measured on a Lamma apparatus and that the diffusion constant was calculated according to Boltzman-Gralen (Ref 9). The difference of the obtained results from the theory by Flori-Mandel'kern is ex-

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The Fractional Composition and Some Hydrodynamic Properties of Polyphenylmethacrylamide 76-32-5-17/47

plained by the fact that molecules of the poly-N-phenylmethacrylamide do not swell so much in acetone as the side ramifications (phenyl groups) are steric hindrances to a solid block packing and a coagulation to compact nodes is not possible. From the results can also be seen that the polymer consists of similar, not ramified chains, as otherwise the fractionating would take place less according to the molecular weight than according to the ramification. Finally the authors mention that the poly-N-phenylmethacrylamide is a poly-disperse high-molecular product with 50% of  $M \approx 350000$  being present, and with the majority of the assumable molecules having at least  $M = 250000$ . There are 4 figures, 1 table, and 13 references, 5 of which are Soviet.

ASSOCIATION: Akademiya nauk SSSR, Institut vysokomolekulyarnykh soyedineniy, Leningrad (Leningrad Institute of High-Molecular Compounds, AS USSR)

Card 2/3

BRESLER, S.Ye.; KOTON, M.M.; OS'MINSKAYA, A.T.; POPOV, A.G.; SAVITSKAYA, M.N.

Increasing polymer thermostability by cyclization in macromolecular chains with partial decomposition. Vysokom.soed. 1 no.7:1070-1073  
Jl '59. (MIRA 12:11)

1. Institut vysokomolekulyarnykh soyedineniy AN SSSR.  
(Polymers--Thermal properties)

ALDOSHIN, V.G.; SAVITSKAYA, M.N.; FRENKEL', S.Ya.

Some physicochemical characteristics of high molecular weight  
polyacrylamide. Vysokom. soed. 2 no. 3:347-353 Mr '60.  
(MIRA 13:11)

1. Institut vysokomolekulyarnykh soedineniy AN SSSR.  
(Acrylamide)

VOIKOVA, A.I.; KOTON, M.M.; SAVITSKAYA, M.N.

Effect of the chemical structure of some unsaturated esters on  
their polymerization capacity. Vysokom.soed. 2 no.5:802-805  
My '60. (MIRA 13:3)

1. Institut vysokomolekulyarnykh soyedineniy AN SSSR.  
(Esters) (Polymerization)

SAVITSKAYA, M.N.; KHOLODOVA, Yu.D.; BELETSKAYA, V.Ya.

Synthesis of polymeric soil conditioners. Nauch.trudy Ukr.  
nauch.-issl.inst.fiziol.rast. no.23:200-204 '62. (MIRA 16:2)  
(Soil conditioners) (Polymers)

ACCESSION NR: AT4033993

S/0000/63/000/000/0112/0116

AUTHOR: Bazilevskaya, N. P.; Savitskaya, M. N.

TITLE: Synthesis of polychelate compounds based on anthranilic acid and aminophenols

SOURCE: Geterotsepnnyye vyssokomolekulyarnyye soyedineniya (Heterochain macromolecular compounds); sbornik statey. Moscow, Izd-vo "Nauka," 1963, 112-116

TOPIC TAGS: polymer, polychelate compound, soluble anthranilic resin, insoluble anthranilic resin, soluble aminophenolic resin, insoluble aminophenolic resin, polycondensation, polymerization anthranilic acid, formaldehyde, aminophenol, synthetic resin, metallic ion absorption, microfertilizer

ABSTRACT: Soluble and insoluble anthranilic (I and II), m-aminophenolic (III and IV), o-aminophenolic (V and VI) and p-aminophenolic (VII and VIII) resins were synthesized by polycondensation (38% formaldehyde with anthranilic acid or the appropriate aminophenol in an alkaline solution) in order to obtain resins with peak Fe, Cu or Zn ion absorption capacity for use as agricultural microfertilizers. Reaction times were generally 8 hours, temperatures 100-105C, resorcinol was added for I and II (10 times as much for II as for I), polycondensation was exothermic for I, III and IV, yields were 76, 85, 80, 80, 85, 66, 80 and 70% for I to VIII.

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ACCESSION NR: AT4033993

respectively. Polychelate compounds were then obtained by saturation of the synthesized resins with solutions of copper sulfate, zinc sulfate or ferric sulfate. Compounds based on soluble resins contained more metal and their absorption capacity ranged downward across the series III-I-V-VII for Fe, III-VII-I for Cu and VII-I-V-III for Zn. Orig. art. has: 3 tables and 2 graphs.

ASSOCIATION: Ukrainskiy nauchno-issledovatel'skiy institut fiziologii rasteniy (Ukrainian Scientific Research Institute for Plant Physiology)

SUBMITTED: 20Jul62

DATE ACQ: 30Apr64

ENCL: 00

SUB CODE: 0C

NO REF SOV: 002

OTHER: 005

Card 2/2

SAVITSKAYA, M.M. [Savyts'ka, M.M.]; KHOLODOVA, Yu.D.; POSTORONKO, A.I.;  
GRIZODUB, A.P. [Hryzodub, A.P.]

New coagulating agents for the acceleration of brine purification in the production of soda. Khim. prom. [Ukr.] no.3:32-35  
J1-S '63. (MIRA 17:8)

1. Ukrainskiy nauchno-issledovatel'skiy institut fiziologii  
rasteniy (for Savitskaya, Kholodova). 2. Slavyanskim sodovyy  
kombinat (for Postoronko, Grizodub).

SAVITSKAYA, M.N.; KHOLODOVA, Yu.D.

Polyacrylamide and its derivatives. Vysokom. soed. 6  
no.3:493-498 Mr'64. (MIRA 17:5)

1. Institut fiziologii rasteniy AN UkrSSR.

L 10988-66 EWT(m)/EWP(i)/I/EWA(c) WW/RM  
 ACC NR: AP6000006 UR/0080/65/038/011/2533/2537 37  
 AUTHOR: Korotkina, O.Z.; Magdinets, V.V.; Savitskaya, M.N.; Eskin, V.Ye.  
 ORG: Institute for High Molecular Compounds AN SSSR (Institut vysokomolekulyarnykh soedineniy AN SSSR) Scientific Research Institute for Plant Pathology ASKhN UkrSSR (Nauchno-issledovatel'skiy institut fiziologii rasteniy ASKhN UkrSSR)  
 TITLE: Study of the properties of polyacrylamide by the method of light scattering  
 SOURCE: Zhurnal prikladnoy khimii, v.38, no.11, 1965, 2533-2537  
 TOPIC TAGS: nitrogen compound, light scattering, polymerization  
 ABSTRACT: The object of the work was to establish a relationship between the characteristic viscosity,  $\eta$ , and the molecular weight, M, for high molecular weight polyacrylamide using the method of light scattering for determination of the molecular weight. Polymerization of the acrylamide was carried out in an oxidation-reduction system in an aqueous medium in the presence of 0.5% potassium persulfate, 0.25% sodium hydrosulfate, and 0.14% triethanolamine, and in the presence of atmospheric oxygen. The polymerization temperature was 50° for the first two hours, and then 60° for eight hours. The polymer was obtained as an 8%  
 Card 1/2 UDC: 541.6 + 543.436

L 10988-66

ACC NR: AP6000006

aqueous solution. After dilution to 1%, the polyacrylamide was precipitated with acetone and dried in vacuum at 50°. The yield was 97%. The product was a white slightly hygroscopic powder readily soluble in water. Fractionation was done by solution in formamide, and 8 fractions were obtained. Measurement of the viscosity and the light scattering of the solutions was done at 20°. To avoid ionization, the measurements were made in a 10% aqueous solution of sodium chloride. Viscosity was measured with an Ostwald viscometer with a flow time of 110 seconds for the solvent. The light scattering was measured on a "Sofika" photoelectric turbidometer and the results were interpreted by the method of double extrapolation. The measurements were carried out in a range of angles from 30 to 150° and at polymer concentrations of 0.20-0.65 and 0.03-0.10% for the low and high molecular fractions, respectively. The results are exhibited in tabular form. A plot, on a log-log scale, shows the dependence of the characteristic viscosity on molecular weight. Results are said to agree closely with previous results obtained by determination of the molecular weight by cementation and diffusion. Orig art. has: 8 formulas, 2 figures, and 2 tables.

SUB CODE: 07/ SUBM DATE: 28 Nov 63/ ORIG REF: 005 OTH REF: 010

Card

2/2

NAGDASEVA, A.I.; SAVITSKAYA, N.F.

Intermedin in ophthalmology. Vest. oft. 73 no. 4:35-36 J1-Ag '60.  
(MIRA 14:1)

(PITUITARY BODY—SECRETION)  
(EYE—DISEASES AND DEFECTS)

YAKUBSON, A.K.; SAVINYKH, N.M.

Late results in the treatment of syphilis. Vest. dermat. i ven.  
37 no.8:35-42 Ag'63 (MIRA 17:4)

1. Klinika kozhnykh i venericheskikh bolezney (zav. - kafedroy  
prof. A.K. Yakubson) Novosibirskogo meditsinskogo instituta i  
Novosibirskiy gorodskoy venerologicheskii dispanser (glavnyy  
vrach A.M. Izmaylova).

SAVITSKAYA, N.N., Cand Biol Sci — (diss) "Effect of excessive soil  
humidification on certain physiological processes of barley."  
Len, 1959. 16 pp (Min of Education RSFSR. Len State Pedag Inst  
im A.I. Gertsen. Chair of Botany<sup>y</sup>). 150 copies (KL,40-59, 103)

21

SAVITSKAYA, N.N.

Free amino acid content in barley plants under conditions of soil  
moisture deficiency. Fiziol. rast. 12 no.2:349-350 Mr-Apr '65.  
(MIRA 18:6)

1. Leningradskiy pedagogicheskiy institut imeni Gertsena.

17(4), 30(1)  
AUTHOR:

Savitskaya, N. N.

SOV/20-128-4-60/65

TITLE:

The Influence of Excessive Soil Moisture on the Barley Plant  
at Different Periods of Its Development

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 128, Nr 4, pp 850-852  
(USSR)

ABSTRACT:

The reasons for an unfavorable effect of the factor mentioned in the title are manifold, but on the whole they are due to a change of the root zone in which the oxygen content is reduced, while the content of carbonic acid increases (Ref 7). The main indications for the suffering of plants are: weakly developed root system, suppression of growth and development, reduced absorption of water and nutritive substances and finally reduced yield (Refs 3, 5, 6, 9-12). Most of the papers dealing with this subject neglected the changes of the plant's requirements during ontogenesis with respect to its surrounding. The present paper shall now supply this. The experiments made in plant incubators lasted over three years. Flooding and saturation of the soil to 100% was carried out in different developmental stages. Control plants were

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SOV/20-128-4-60/65

The Influence of Excessive Soil Moisture on the Barley Plant at Different Periods of Its Development

cultivated in a soil saturated to 70% of its total moisture capacity. Tables 1 and 2 show the results. Thus the author could prove that a flooding of the soil during early stages of development inhibits growth and development of the plant. The absorption functions of the root system are reduced with regard to water and basic nutritive substances, the activity of oxidation processes is increased. All this considerably reduces the crop. Despite of an increased activity of the respiratory ferments and of the suppressed absorption functions with regard to some nutritive elements, flooding of the soil during the crucial period (from the formation of tetrads to earing) has no such destructive effect on the crop. Excessive soil moisture (100% of its total capacity) hardly reduces the yield of grain, but considerably accelerates processes of growth. There are 2 tables and 12 Soviet references.

ASSOCIATION: Leningradskiy gosudarstvennyy pedagogicheskiy institut im.  
Card 2/3 A. I. Gertsena

SOV/20-128-4-60/65

The Influence of Excessive Soil Moisture on the Barley Plant at Different  
Periods of Its Development

(Leningrad State Pedagogical Institute imeni A. I. Gertsen)

PRESENTED: June 12, 1959, by A. L. Kursanov, Academician

SUBMITTED: June 5, 1959

Card 3/3

SAVITSKAYA, N.N.

Effect of excessive soil moisture on barley during various periods of development. Uch.zap.Ped.inst.Certs. 249:285-294 '63.

(MIRA 17:12)

1. Leningradskiy gosudarstvennyy pedagogicheskiy institut imeni A.I. Gertsena.

SAVITSKAYA, N. V.

Cand Chem Sci

Dissertation: "Investigation in the Series of 8-Oxyquinoline Derivatives for  
Discovering the Substances with Antibacterial Activity." 22/11/50

All-Union Sci Res Chemico-pharmaceutic Inst imeni Sergo Ordzhonikidze

SO Vecheryaya Moskva  
Sum 71

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SAVITSKAYA, N. V.

USSR/Chemistry - Quinoline Derivatives Jul 52  
Medicine - Antibacterial Drugs

"The Derivatives of 8-Hydroxyquinoline and Their  
Antibacterial Action. I. 8-Aryloxyquinolines  
and 8-Alkoxyquinolines," M. N. Shchukina, N. V.  
Savitskaya, All-Union Sci Res Chem-Phar Inst  
Imeni S. Ordzhonikidze, Moscow

"Zhur Obshch Khim" Vol 22, No 7, pp 1218-1224

The following compds were synthesized: 8-phen-  
oxyquinoline, with its p-amino-, p-acetamino-,  
and p-hydroxyderivatives, and 5-phenoxy-8-meth-  
oxyquinoline; a series of 8-alkoxyquinolines

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with the alkyls C<sub>3</sub> - C<sub>12</sub>; 5-nitro-8-butoxyquino-  
line, 5-acetamino-8-butoxyquinoline, 5,7-dibromo-  
8-butoxyquinoline, and 5,7-dichloro- and 5,7-di-  
bromo-8-octyloxyquinolines. All these compds are  
characterized by antibacterial and anti-enzyme  
(anti-indophenoloxidase) action.

2297144

USCR/Chemistry - Quinoline Derivatives  
Medicine - Antibacterial Drugs

Jul 52

"The Derivatives of 8-Hydroxyquinoline and Their Antibacterial Action. II. N-Oxides of 8-Hydroxyquinoline and Its Ethers," M. N. Shechukina, N. V. Savitskaya, All-Union Sci Res Chem-Phar Inst (rent S. Ordzhonikidze, Moscow

"Zhur Obshch Khim" Vol 22, No 7, pp 1224-1228

The N-oxides of 8-hydroxyquinoline and 5-chloro-8-hydroxyquinoline, and the N-oxides of 8-alkoxyquinolines with the alkyl radicals  $C_1 - C_{11}$  were

229T45

obtained. States that these compds, despite their inability to form complexes, nevertheless showed definite antibacterial action.

SAVITSKAYA, N. V.

229T45

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001447410009-1

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001447410009-1"

Chemical Abst.  
Vol. 48 No. 5  
Mar. 10, 1954  
Organic Chemistry

Chem 6  
③

The derivatives of 8-hydroxyquinoline and their anti-bacterial activity. I. 8-Aryloxy- and 8-alkoxyquinolines. M. N. Shevukina and N. V. Savitskaya (S. Ordzhonikidze All-Union Research Inst. Pharm. Chem., Moscow). *J. Gen. Chem. U.S.S.R.* 22, 1269-8 (1952) (Engl. translation).—See C.A. 47, 7505f. II. The N-oxides of 8-hydroxyquinoline and its ethers. *Ibid.* 1269-72.—See C.A. 47, 7504d.  
H. L. H.

MF  
7-13-54

SAVITSKAYA, N.V.

Synthesis of *p*-substituted 4-sulfamoylbenzoic acids.  
 J. T. P. Sechenov, N. V. Savitskaya, and M. N. Shelukina  
 (S. Dolzhomkizze All-Union Chem.-Pharm. Inst., Moscow). *Soviet State Obshch. Khim., Akad. Nauk S.S.S.R.*  
 1, 563-71 (1953).—Heating 77.5 g.  $p$ -MeC<sub>6</sub>H<sub>4</sub>SO<sub>2</sub>NH<sub>2</sub>, 45 g. 40% H<sub>2</sub>O<sub>2</sub>, 100 g. FeBr and 450 ml. EtOH in an autoclave 6 hrs. at 100–105°, then addn. of 25 ml. 40% NaOH and heating 2 hrs. longer, gave, after evapn., extn. with Et<sub>2</sub>O, and distn. of the ext. 72.5%  $p$ -MeC<sub>6</sub>H<sub>4</sub>SO<sub>2</sub>NH<sub>2</sub>, b.p. 156–8°, the reaction of RSO<sub>2</sub>Cl with Pr<sub>2</sub>NH in alc. KOH gave 56% product. To 50 ml. N NaOH and 2.5 g. Pr<sub>2</sub>NH was added with cooling 5 g.  $p$ -HO<sub>2</sub>CC<sub>6</sub>H<sub>4</sub>SO<sub>2</sub>Cl in Me<sub>2</sub>CO, the mixt. stirred 1 hr., the solvent evapd., the residue dild. with H<sub>2</sub>O and acidified to obtain 56%  $p$ -HO<sub>2</sub>CC<sub>6</sub>H<sub>4</sub>SO<sub>2</sub>NH<sub>2</sub>, m. 196–7° (from EtOH). Similarly was prepd. 80%  $p$ -HO<sub>2</sub>CC<sub>6</sub>H<sub>4</sub>SO<sub>2</sub>NEt<sub>3</sub>, m. 192–4° (from EtOH), and  $p$ -HO<sub>2</sub>CC<sub>6</sub>H<sub>4</sub>SO<sub>2</sub>NBu<sub>3</sub>, m. 166–7°. Addn. of 7 g.  $p$ -HO<sub>2</sub>CC<sub>6</sub>H<sub>4</sub>SO<sub>2</sub>Cl in Me<sub>2</sub>CO to 10 g. (HOCH<sub>2</sub>CH<sub>2</sub>)<sub>2</sub>NH in 50 ml. H<sub>2</sub>O at 0–5° yielded 4 g.  $p$ -HO<sub>2</sub>CC<sub>6</sub>H<sub>4</sub>SO<sub>2</sub>N(CH<sub>2</sub>CH<sub>2</sub>OH), m. 217–20° (from 80% EtOH); similarly (in the presence of NaOH) was prepd. 85.5%  $p$ -HO<sub>2</sub>CC<sub>6</sub>H<sub>4</sub>SO<sub>2</sub>N(CH<sub>2</sub>CH<sub>2</sub>)<sub>2</sub>O, m. 260–1° (from AcOH), which, refluxed in EtOH in the presence of dry HCl 12 hrs., gave the Et ester, m. 92–4° (from dil. EtOH).  
 G. M. Koslapoff

*SAVITSKAYA, N.V.*

USSR/Chemistry - Pharmaceuticals

Card 1/1    Pub. 151 - 28/36

Authors    : Savitskaya, N. V., and Shchukina, M. N.

Title       : Synthesis of phenothiazine-1-carboxylic acid derivatives

Periodical : Zhur. ob. khim. 24/1, 152-156, Jan 1954

Abstract   : Various amides and hydrazides of phenothiazine-1-carboxylic acid and some of their derivatives were synthesized and their anti-bacterial (anti-tubercular) effects were investigated. The effect of a thionyl chloride surplus, phosphorous oxychloride and phosphorous pentachloride on phenothiazine-1-carboxylic acid, is explained. The synthesis of acid chloride of trichlorophenothiazine-1-carboxylic acid, according to Curtius, results in the formation of an imidazole cycle. Six references: 3-USA; 2-USSR and 1-German (1944-1953).

Institution : All-Union Scientific Research Chemical-Pharmaceutical Institute

Submitted   : July 14, 1953

*Savitskaya*

13

✓ Synthesis of derivatives of *p*-hydroxybenzenesulfonic  
acid. N. V. Savitskaya and M. N. Shchukina. *J. Gen.*  
*Chem. U.S.S.R.* 23, 247-20 (1954) (ingl. translation).—  
See *CA* 49, 14065b.

B. M. R.

*chem*  
*pm* *est* 2

SAVITSKAYA, N. V.

① Synthesis of derivatives of *p*-hydroxybenzenesulfonic acid.

N. V. Savitskaya and M. N. Savelkova (S. Ordzhonikidze  
All-Union Sci. Research Chem.-Pharm. Inst., Moscow).

*Zhur. Obshchei Khim.* 24, 2052-3 (1951).  $\text{N}_2\text{H}_4 \cdot \text{H}_2\text{O}$  (5 g.) in 5 ml.  $\text{H}_2\text{O}$  treated slowly with 10 g.  $p\text{-BzOC}_6\text{H}_4\text{SO}_2\text{Cl}$  and cooled yielded 71%  $p\text{-HOC}_6\text{H}_4\text{SO}_2\text{NHNH}_2$ , decomp. 165-6° (from  $\text{H}_2\text{O}$ ). This with  $p\text{-HOC}_6\text{H}_4\text{CHO}$  in hot  $\text{H}_2\text{O}$  gave  $p\text{-HOC}_6\text{H}_4\text{SO}_2\text{NHNHCH(C}_6\text{H}_5\text{)OH}$ , m. 148-9° (from aq. EtOH).  $p\text{-AcNHCH}_2\text{CH}_2\text{CHO}$  similarly gave  $p\text{-HOC}_6\text{H}_4\text{SO}_2\text{NHNHCH(C}_6\text{H}_5\text{)NHAc}$ , d. comp. 184-5° (from aq. EtOH), while  $p\text{-Me}_2\text{NC}_6\text{H}_4\text{CHO}$  gave  $p\text{-HOC}_6\text{H}_4\text{SO}_2\text{NHNHCH(C}_6\text{H}_5\text{)NMe}_2$ , decomp. 157-3° (from 25% AcOH),  $\text{N}_2\text{H}_4 \cdot \text{H}_2\text{O}$  and  $p\text{-EtOC}_6\text{H}_4\text{SO}_2\text{Cl}$  similarly gave 70%  $p\text{-EtOC}_6\text{H}_4\text{SO}_2\text{NHNH}_2$ , m. 111° (decomp.; from EtOH), converted to the following  $p\text{-EtOC}_6\text{H}_4\text{SO}_2\text{NHNHCH(R)}$  (R given):  $p\text{-AcNHCH}_2\text{CH}_2$ , decomp. 186-6.5° (from EtOH);  $p\text{-Me}_2\text{NC}_6\text{H}_4$ , decomp. 170-1° (from EtOH);  $3,4\text{-Me}_2\text{(HO)C}_6\text{H}_3$ , d. comp. 128-30°. The reaction of 16 g.  $p\text{-AcNHCH}_2\text{CH}_2\text{NH}_2$  (16 g.) with 24 g.  $p\text{-EtOC}_6\text{H}_4\text{SO}_2\text{Cl}$  in  $\text{H}_2\text{O}$  in the presence of 17 g.  $\text{Na}_2\text{CO}_3$  (completed in 1 hr. at 40°) gave  $p\text{-HOC}_6\text{H}_4\text{SO}_2\text{NHNHCH(C}_6\text{H}_5\text{)NH}_2$ , m. 155-6°, after hydrolysis of the intermediate by refluxing 3 hrs. with 100 ml. 20% NaOH. Similar treatment of  $p\text{-BzOC}_6\text{H}_4\text{SO}_2\text{Cl}$  gave  $p\text{-HOC}_6\text{H}_4\text{SO}_2\text{NHNHCH(C}_6\text{H}_5\text{)NH}_2$ , m. 201-1° (from  $\text{H}_2\text{O}$ ). Heating 15 g.  $p\text{-C}_6\text{H}_4(\text{N}_2)_2$  with 9 g.  $p\text{-EtOC}_6\text{H}_4\text{SO}_2\text{H}$  in  $\text{H}_2\text{O}$  2.5 hrs. at 45° gave  $p\text{-HOC}_6\text{H}_4\text{SO}_2\text{NHNHCH(C}_6\text{H}_5\text{)NH}_2$ , decomp. 246° (from AcOH).  $\text{AcNHCH}_2\text{CH}_2\text{CH}_2\text{NH}_2$  with  $p\text{-BzOC}_6\text{H}_4\text{SO}_2\text{H}$  gave an intermediate product which, refluxed with 20% HCl 26 hrs., was hydrolyzed to  $p\text{-HOC}_6\text{H}_4\text{SO}_2\text{NHNHCH(C}_6\text{H}_5\text{)NH}_2$ , decomp. 240-3° (from concd. HCl);  $p\text{-EtOC}_6\text{H}_4\text{SO}_2\text{Cl}$  in the above reaction gave, after hydrolysis of the intermediate 26 hrs. with 20% HCl,  $p\text{-EtOC}_6\text{H}_4\text{SO}_2\text{NHNHCH(C}_6\text{H}_5\text{)NH}_2$ , decomp. 236° (from concd. HCl). None of the products had a notable antitubercular activity.

G. M. Kosolapoff

SAVITSKAYA, N. V.

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9. Synthesis of  $\beta$ -(N-2-chlorophenothiazyl)propionic acid  
 its derivatives and derivatives of  $\beta$ -N-phenothiazylpropionic  
 acid. N. V. Savitskaya, Yu. S. Tszin, and M. N. Shchur-  
 kina (S. Otdel'nykh Akad. Nauk SSSR, Chem. Pharm. Research  
 Inst., Moscow). *Zh. Obshch. Khim.* 40, 2300-5 (1966).  
 —Heating 17.4 g. 3-chlorodiphenylamine, 5.8 g. S, and 0.2 g.  
 iodine 1.3 hrs. at 160–80°, until H<sub>2</sub>S evol.; on stopped gave  
 69.5% 2-chlorophenothiazine, m. 199–200.5° (from MePh).  
 This (10 g.) and 30 ml. CH<sub>2</sub>:CHCN and 0.1 g. hydroquinone  
 treated at room temp. with 2 ml. PhNMe<sub>2</sub>OH soln. (from  
 0.76 g. toluenesulfonate salt) and heated 1.5 hrs. at 20°,  
 gave 81%  $\beta$ -(N-2-chlorophenothiazyl)propionitrile (I), m.  
 185–9° (from AcOH), which heated in sealed ampul with  
 concd. H<sub>2</sub>SO<sub>4</sub>-EtOH 6 hrs. at 130–10°, then refluxed with  
 26% KOH 6 hrs. and acidified, gave 87%  $\beta$ -(N-2-chloro-  
 phenothiazyl)propionic acid (II), m. 166.5–58° (from MeOH);  
 if the treatment with KOH is omitted there is formed the  
 Et ester (III), b.p. 205–9°, m. 64.5–66° (from petr. ether).  
 Hydrogenation of I over Raney Ni in EtOH under 10  
 atm. NH<sub>3</sub> at 100–10° and 60 atm. H<sub>2</sub> gave N-(3-aminopropyl)-  
 2-chlorophenothiazine; HCl salt, m. 233–5° (from  
 dry EtOH). III and satd. NH<sub>3</sub> in dry EtOH gave  
 in 24 hrs.  $\beta$ -(N-2-chlorophenothiazyl)propionamide, m.

1/2

*Devil's Claw, N.Y.; Tazewell, Y.S.; Shoh, M.J.*

143.5-5.5° (from  $C_6H_6$ ); similarly III and 65%  $NH_3$ ,  $H_2O$  in EtOH heated 28 hrs. on steam bath gave the corresponding *hydrazide*, m. 132.5-3.5° (from MeOH); *p*-acetylaminobenzylidene deriv., m. 230-7°. II and  $PCl_5$  in  $C_6H_6$  gave the crude acyl chloride which was freed of solvent and  $POCl_3$  by mild heating *in vacuo* and washing with  $C_6H_6$ , and this solid chloride was refluxed with  $HOCH_2CH_2Cl$  11 hrs. yielding 70% II 2-chloroethyl ester, m. 83-4° (from EtOAc), which heated with  $Me_2NNH_2$  5.5 hrs. at 100° in ampul gave 46% 1,1-dimethyl-1-[2'-( $\beta$ -N-2-chlorophenothiazyl)propionyloxyethyl]hydrazonium chloride, m. 184-5° (from EtOAc-EtOH). Heating  $\beta$ -N-phenothiazylpropionic acid with MeOH in the presence of  $H_2SO_4$  6 hrs. gave its Me ester, 83%, m. 64.5-5.5°, b. 210-14°; Et ester, prepd. similarly to above from the corresponding nitrile in 84% yield, m. 63.5°, b. 195-202°. The free acid treated with  $PCl_5$  as above, followed by  $NH_3$ , gave  $\beta$ -N-phenothiazylpropionamide, m. 125-6° (25%) (from aq. EtOH). The Et ester and  $N_2H_4 \cdot H_2O$  heated 28 hrs. gave the *hydrazide*, decomp. 98-0°, whose *p*-acetylaminobenzylidene deriv., m. 192-3°, and 4-hydroxy-3-methoxybenzylidene deriv., m. 200.5-202° (from AcOH). Treatment of the acyl chloride, prepd. as above, with  $Me_2NCH_2CH_2OH$  in  $C_6H_6$  gave  $\beta$ -N-phenothiazylpropionic acid dimethylaminoethyl ester, 86%, b. 214-10°;  $HCl$  salt, m. 141.5-2.6° (from PhCl). Similarly the acyl chloride and  $ClCH_2CH_2OH$  gave the 2-chloroethyl ester, m. 75-0°, which with  $Me_2NNH_2$  kept 2 days at room temp. and 3 days at 0° gave 1,1-dimethyl-1-[2'-( $\beta$ -N-phenothiazyl)propionyloxyethyl]hydrazonium chloride, m. 174.5-5.5° (from abs. EtOH). G.M.: Kasolapoff

5

12/2  
PM MT

SAVITSKIYA, N. V.

1  
3-Dimethylaminopropanol M. N. Shchukina, N. V.  
Savitskaya, T. V. Gortinskaya, Yu. B. Tsizin, and V. G.  
Samolovova. U.S.S.R. 105,447, May 26, 1957. The  
compd. is obtained by reduction of ethylene cyanohydrin and  
methylation of the resulting 3-aminoopropanol. The reduc-  
tion of ethylene cyanohydrin is carried out in a ammoniacal  
soln. and the methylation is done with  $\text{CH}_3\text{O}$  to  $\text{HCO}_2\text{H}$ .  
M. Hosh.

6  
1-4E3d  
1-4E4f

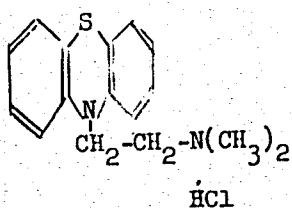
11  
n2

122. Synthesis of Aminazine and Other Phenothiazine Derivatives

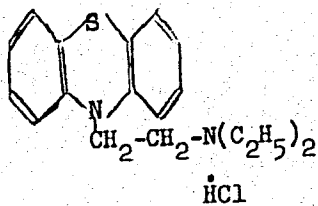
"On the Synthesis of Aminazine and Its Analogues," by N. M. Shchukina, N. V. Savitskaya, and Yu. S. Tsizin, All-Union Scientific-Research Chemicopharmaceutical Institute imeni S. Ordzhonikidze, Meditinskaya Promyshlennost' SSSR, Vol 11, No 3, Mar 57, pp 20-24

This article describes a method of synthesizing aminazine and its analogues--etizine, dinezine, diprozine, and mul'tezine -- all phenothiazine derivatives. All have been found to possess important pharmacological properties, i.e., they act as spasmolytics and sedatives, affect the

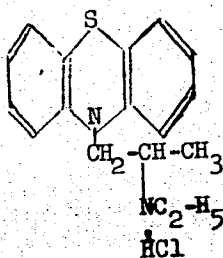
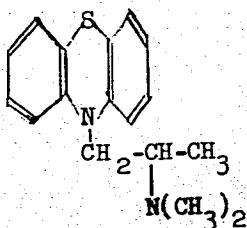
central nervous system, and are used as therapeutic agents in nervous diseases and in the practice of psychiatry. Aminazine is the only one of the group of phenothiazine derivatives in which there is substitution in the nucleus. In all other cases, only the nitrogen is replaced by N-alkylaminoalkyl radicals. They are easily synthesized by the heating of phenothiazine with haloidoalkyl-aminoalkyl compounds and alkaline reagents. The best results are obtained when condensation is carried out with sodium hydroxide, with the water and immiscible solvents -- benzene and toluol -- being continuously drained off, a method developed at the experimental plant of the All-Union Scientific-Research Chemicopharmaceutical Institute by L. I. Morozovskaya and M. A. Vorob'yev. N-dialkylaminoalkylphenothiazines are obtained having the following structural formulas:



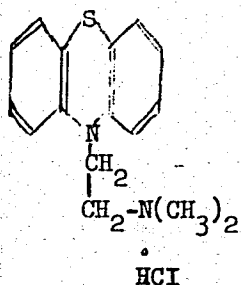
Etizine (anergan)



Dinezine (diparkol)

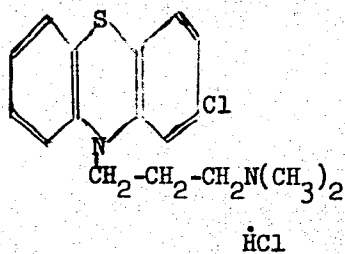


Diprozine (fenergan)



Promazine

Parfezine (parsidol)



Aminazine (largactil,  
Chlorpromazine)

Other ways of compounding the dialkylaminoalkyl radical with phenothiazine by a method of condensing phenothiazine with substances having an active unsaturated system or with substances with an oxide radical are escribed. (U)

GORTINSKAYA, T.V.; SAVITSKAYA, N.V.; SAMOLOVOVA, V.G.; TSIZIN, Yu.S.;  
SHCHUKINA, M.N.

Obtaining dimethylaminopropanol from ethylene cyanohydrin. Med.  
prom. 11 no.4:23-25 Ap '57. (MLRA 10:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatssevicheskiy  
institut imeni S.Ordzhonikidze.  
(PROPANOL) (HYDRACRYLONITRILE)

SAVITSKAYA, N.V.; SHUKINA, M.N.

Synthesis of 3-( $\beta$ -aminoethyl)indazole. Zhur. ob. khim. 31  
no.3:1015-1018 Mr '61. (MIRA 14:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsev-  
ticheskiy institut imeni S. Ordzhonikidze.  
(Indazole)

SAVITSKAYA, N.V.; SHCHUKINA, M.N.

Synthesis of 5-amino-3- $\beta$  (aminoethyl)indazole. Zhur.ob.khim. 31  
no.6:1924-1926 Je '61. (MIRA 14:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy  
institut imeni S.Otdzhonikidze.  
(Indazole)

SAVITSKAYA, N.V.; TARASEVICH, Ye.S.; SHCHUKINA, M.N.

Some derivatives of 5-nitro- and 5-amino-3-indazolecarboxylic acid. Zhur.ob.khim. 31 no.10:3255-3257 0 '61. (MIRA 14:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S.Ordzhonikidze.  
(Indazolecarboxylic acid)

L 64479-65 EWT(m)/EPF(c)/EWA(d)/EWP(t)/EWP(z)/EWP(b) IJP(c) MJW/JD/JG/WB

ACCESSION NR: AP5020698

UR/0314/65/000/008/0016/0019  
620.193:669.15:547.26:536.46:539.893

AUTHOR: Savitskaya, O. P. (Engineer)

TITLE: Investigation of carbonyl corrosion of metals

SOURCE: Khimicheskoye i neftyanoye mashinostroyeniye, no. 8, 1965, 16-19

TOPIC TAGS: carbon monoxide, corrosion, aluminum, copper, copper alloy, steel alloy

ABSTRACT: The aim of the investigation was to clear up existing inconsistencies in the literature regarding the protective effect of chromium on steel subject to carbonyl corrosion. The steels, metals, and alloys studied were: 20, 30KhMA, EI579, Kh5M, Kh8V, Kh13, Kh18N9T, Kh21N5T, Kh21N6M2T, Kh25T, St3, electroplated with Cu, St3 thermomdiffusion chrome-plated with 0.05 mm thick layer of 22% Cr, Al, Cu, brass, bronze, and Ti. The experiments were carried out on the installation shown schematically in Fig. 1 on the Enclosure. The experimental results are shown graphically in Fig. 2 on the Enclosure. It is concluded that the rate of corrosion increases with increase in the CO pressure, and that the maximum rate of corrosion occurs in the temperature interval of 175-250C. Orig. art. has:

Card 1/4

L 64479-65

ACCESSION NR: AP5020698

5 graphs and 1 figure.

ASSOCIATION: Irkutskiy filial instituta "Giproneftemash" (Irkutsk Branch of the Institute "Giproneftemash")

SUBMITTED: 00

ENCL: 02

SUB CODE: GC

NO REF SOV: 006

OTHER: 000

Card 2/4

L 64479-65

ACCESSION NR: AP5020698

ENCLOSURE: 01

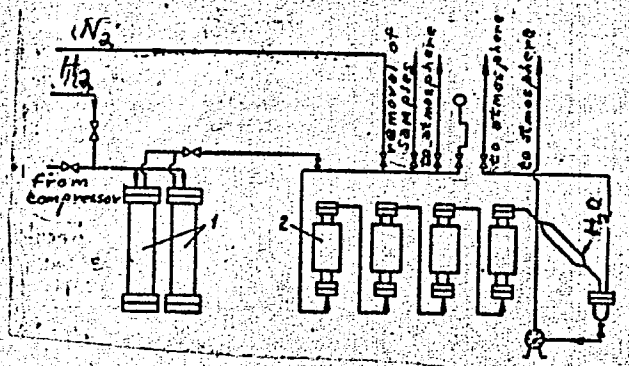


Fig. 1.

Schematic of the experimental installation.  
1- high pressure chamber; 2- column

Card 3/4

L-64479-65

ACCESSION NR: AP5020698

ENCLOSURE: 02

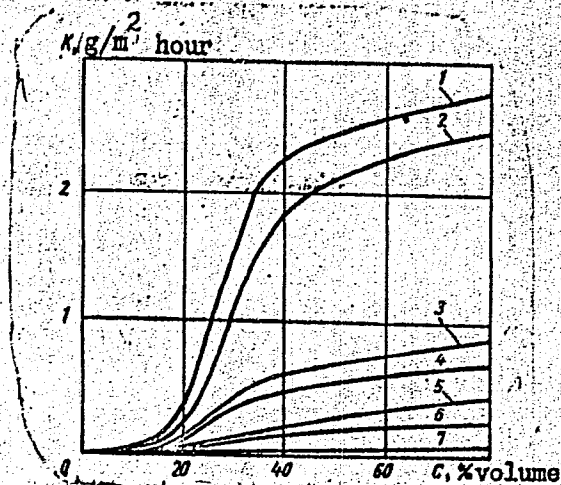


Fig. 2.

Dependence of carbonyl corrosion  $K$  on carbon monoxide concentration  $C$ . 1- steel 20; 2- 30KhM; 3- Kh5M; 4- EI579; 5- Kh8V; 6- 2Kh13; 7- bronze

Card 4/4

*SAVITSKAYA, P. V.*

*7*  
3-Chlorodiphenylamine A. F. Bekhit, A. M. Grigoryev,  
skii, P. V. Savitskaya, E. S. Tarasovich, Yu. S. Tsigan,  
and M. N. Stetsukin. U.S.S.R. 103,356, Apr. 23, 1987. *4E4j*  
The title amine is obtained by decarboxylation of 3,6-  
Cl(HO.C)C<sub>6</sub>H<sub>3</sub>NHPh at 210-30°. The decarboxylation  
can be carried out at a lower temp. when done in a soln. of  
3-ClC<sub>6</sub>H<sub>4</sub>NHPh in the presence of Fe filings. M. Hosh.

*PM*  
*aug*

SAVITSKAYA, R.S., inzh.; SHPUNT, M.I., inzh.

Computers for the control of petroleum refining processes. Mekh.1  
avtom. proizv. 17 no.2:55-58 F '63. (MIRA 16:2)  
(Petroleum—Refining) (Electronic computers)

BURYAK, V. A.; SAVITSKAYA, T. L. [Savyts'ka, T. L.]

Basic parameters of the operating conditions of new rectifications columns of a tar distillation plant. Khim. prom. [Ukr.] no. 1:19-22 Ja-Mr '62. (MIRA 15:10)

1. Dneprodzerzhynskiy koksokhimicheskiy zavod.

(Distillation apparatus)  
(Coke industry—By-products)

KOLGANOV, T.S.; SAVITSKAYA, T.L.; SHEVCHENKO, A.P.

Experience in the operation of lime-ammonium shops. Koks.  
i khim. no.1:33-36 '64. (MIRA 17:2)

1. Dneprodzerzhinskiy koksokhimicheskiy zavod.

PODGORETSKIY, Ye.K.; SAVITSKAYA, V.A.

Solubility of highly acetylated acetylcellulose in mixtures of  
methylene chloride with alcohols. Soob.o nauch.rab.chl.VKHO  
no.3:40-42 '55. (MIRA 10:10)

(Solubility) (Cellulose acetates) (Methane)

SAVITSKAYA, V. A.

"Late Autumn Sowing of Spring Wheat, Barley, Oats, and Millet  
as a Method of Improving Seed Quality in the Altai Kray." Cand  
Agr Sci, All-Union Sci Res Inst of Plant Growing, Leningrad, 1953  
(RZhBiol, No 6, Nov 54)

Survey of Scientific and Technical Dissertations Defended at USSR  
Higher Educational Institutions (11)

SO: Sum. No.521, 2 Jun 55

SAVITSKAYA, V.A. kandidat sel'skokhozyaystvennykh nauk,

Harvesting grain in separate stages in Kulunda Steppe. Zemledelie  
5 no.7:77-78 JI '57. (MLBA 10:9)

1. Slavgorodskaya selektsionno-opytnaya stantsiya.  
(Kulunda Steppe--Grain--Harvesting)

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Grains.  
ABS. JOUR. : RZBiol., No. 21, 1958, No. 95924

AUTHOR : Savitskaya, V.  
INST. :  
TITLE : Hard Wheat in the Altai

ORIG. PUB. : S.kh.Sibir, 1957, No.10, 21-26

ABSTRACT : The soils of the Altai are favorable for the cultivation of hard wheat, but in regard to the biological peculiarities of hard wheat and the climatic conditions of the region, it is essential while raising this crop to provide measures for the accumulation, protection and correct use of soil moisture. It is expedient when virgin soil is lacking to sow it on fallows. Two varieties, Gordeiforme 10 and Malyanopus 69, are distributed and the

CARD: 1/2

Country : M  
CATEGORY :  
ABST. JOUR. : RZBiol., No. 21, 1958, No. 95924  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : Khar'kov variety is considered promising.  
--O.G.

CARD:

2/2

SAVITSKAYA, V.A., kand. sel'skokhozyaystvennykh nauk.

Some peculiarities of hard wheat cultivation in Western Siberia.  
Zemledelie 6 no.5:47-50 My '58. (MIRA 11:6)  
(Siberia, Western---Wheat)

YAKUBTSINER, M.M.; SAVITSKAYA, V.S.

Wheat

Late fall sowing of spring wheat. Sov.agron. 10 no. 10, 1952.

9. Monthly List of Russian Accessions, Library of Congress, December 1952~~1951~~, Unclassified.

SHULITSKAYA, V.V.

50. External Use of Ronidaza Effective in the Therapy of Burns, Ulcers, Hematomas

"Ronidaza Preparation," by V. V. Savitskaya, Izobretatel'stvo v SSR, Vol 4, Apr 57, pp 15-18

Ronidaza, an enzymatic substance prepared at the Central Institute of Traumatology and Orthopedics at Moscow, under the guidance of Prof N. N. Priorov, Corresponding Member of the Academy of Sciences USSR, has been approved by the Pharmacological Committee of the Ministry of Health USSR for extensive use since October 1956.

Ronidaza preparation was used at the polyclinic and stationar (inpatient hospital) of the Central Institute of Traumatology and Orthopedics for the treatment of more than 300 patients with burns, postoperative scars, contractures following inflammatory processes, slow-healing ulcers, and during preparatory periods for plastic skin operations and in treating trachoma. Favorable results included the softening of scar tissue, increased amplitude of motion of joints, and clean surface of wounds. It simplified the course of plastic skin operations when used during the preparatory period so that in certain cases an operation became unnecessary.

An advantage of ronidaza is that it may be used externally (moist compresses), whereas foreign hyaluronidase preparations are used for injection only. Since ronidaza can alter tissue permeability, it can be used to increase the distribution of other substances, such as drugs and antibiotics, in the organism. The simultaneous use of ronidaza with penicillin increases the absorption of the latter. Ronidaza activity is increased by its simultaneous use with vitamins, especially with vitamin C.

Ronidaza preparation was tested at the hospital of the Central Institute of Traumatology and Orthopedics for 3 years, and results prove that ronidaza is most effective in treating patients with contractures and scars of relatively short duration (1-2 years). Data also indicate that good results were obtained when ronidaza was accompanied by exercise.

At present, ronidaza preparation is manufactured at the serum producing plant of Myasokombinat imeni Mikoyan, and in the near future it will be released to the pharmaceutical network for sale. (U)

*Sum 1429*

SAVINOV, O.A., doktor tekhn.nauk; LAVRINOVICH, Ye.V., kand.tekhn.nauk;  
SAVITSKAYA, V.V., inzh.

Vibration rolling of thin-walled reinforced concrete and mesh-  
reinforced elements. Bet.i zhel.=bet. 8 no.4:185-187 Ap '62.  
(MIRA 15:5)

(Vibrators) (Precast concrete)

IAVRINOVICH, Ye.V., kand.tekhn.nauk; NEVELEVA, M.Ye., inzh.; SAVITSKAYA,  
V.V., inzh.

Using glues for making the joints of precast reinforced concrete  
elements of hydraulic structures. Gidr. stroi. 32 no.8:22-26  
Ag '62. (MIRA 15:9)

(Glue)

(Precast concrete construction)  
(hydraulic structures)

L 12032-66 EWP(e)/EWT(m)/EWP(t)/EWP(b) IJP(c) JD/WH  
 ACC NR: AF5021671 SOURCE CODE: UR/0030/65/038/003/1863/1866

AUTHOR: Ryabova, L. A.; Savitskaya, Ya. A.; Sheftal', R. N.

ORG: none

Title: Production and structure of indium oxide films  
 SOURCE: Zhurnal prikladnoy khimii, v. 38, no. 8, 1965; 1863-1866

TOPIC TAGS: metal film, indium compound, crystal structure, tantalum, nickel, quartz, molybdenum glass, ~~thermal decomposition~~, dielectric layer, electron diffraction, ~~electric resistance~~

ABSTRACT: T-in (0.06 - 1  $\mu$ )  $In_2O_3$  films were produced on various substrates (tantalum, nickel, quartz, and molybdenum glass) by thermal decomposition of  $(C_5H_7O_2)_3In$  vapor. The dielectric layers of  $In_2O_3$  had a resistivity of  $\sim 10^{12}$  ohm cm. This was much higher than the resistivity of the  $In_2O_3$  films ( $10^3 - 10^6$  ohm cm) obtained by other methods: vaporization of In in a vacuum with subsequent oxidation, or by hydrolysis of chlorides. The temperature of film formation depended on the composition of the substrate. It was 300C on quartz and glass, 400C on nickel, and 650C on tantalum. The 300C temperature was also optimum for the formation of

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UDC, 539.23

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L 12032-66

ACC NR: AP5021671

high-resistivity films ( $10^{10} - 10^{12}$  ohm cm) on quartz and glass. Films with lower resistivity were formed on corresponding substrates at temperatures higher than indicated above. Electron diffraction phase analysis showed that the production of high-resistivity films was related to changes in the film structure affected by the temperature. The films deposited on quartz at 380C and on glass at 350C had an amorphous structure (blurred rings in the electron diffraction picture) and high resistivity. The films, formed on glass at 400C had more distinct rings in their electron diffraction pictures. This indicated a greater ordering of the structure, which evidently affected the decrease in resistivity. Films of the required resistivity could thus be produced by selection of the proper deposition temperature. However, there was a threshold temperature above which the films became contaminated with carbon, liberated by the decomposition of reaction products. For the quartz substrate this temperature was 500C and for tantalum, 750C. The termination of film formation could be determined by the observation of its resistivity without visual examination. The author thanks L.A. Zernova and V.U. Antokhina for assistance during the experiments. Orig.art. has: 3 figures and 1 table.

SUB CODE: 11, 20/ SUEM DATE: 25May64/ ORIG. REF: 002/ OTH. REF: 004

2/20

SAVITSKA, Ya. S.

SAVITSKA, Ya. S. -- "Study of the Structure of Sodium-Silicate Glass on the Basis of the Theory of Specific Heat." Sub 17 Dec 53, "Moscow Order of Lenin Chemicotechnological Institute D. I. Mendeleyev. (Dissertation for the Degree of Candidate in Chemical Sciences).

SO: Vechernaya Moskva January-December 1952

C.A. V-48  
Jan 10, 1954  
Glass, clay products,  
Refractories and  
annealed metal

The heterodynamics of silicate glasses. V. V. Tarasov  
and Ya. S. Savitskaya. *Dokl. Akad. Nauk SSSR*, 1953, 86, 1374 (1952).  
Technol., Moscow. *Zhur. Fiz. Khim.* 27, 744-52 (1953);  
cf. *ibid.* 26, 1374 (1952).—The mol. heat capacity  $C$  of glassy  
 $\text{Na}_2\text{SiO}_3$  is 6.693, 8.092, 9.161, 9.887, 11.11, 12.07, 12.76,  
13.58, 14.76, 15.82, 17.93, and 19.18 cal. at 83.740, 71.635,  
78.086, 84.425, 92.546, 97.976, 104.27, 110.33, 118.99,  
129.83, 149.10, and 162.48° abs., resp. These data agree  
with the theoretical equation, assuming that  $C$  consists of 2  
terms representing (a) vibrations of the  $\text{O}_2\text{SiO}_2$  chains and  
(b) vibrations of the Na ions. Term (b) is greater than  
term (a); e.g., at 98° abs. (a) is 60% of  $C$ . The charac-  
teristic Debye temps.  $\theta$  are for (a) 1323° abs., i.e. identical  
with  $\theta$  for cryst.  $\text{Na}_2\text{SiO}_3$ , and 232° abs. for (b) as com-  
pared with 256° abs. for cryst.  $\text{Na}_2\text{SiO}_3$ . The at. chains in  
 $\text{SiO}_2$  are fully branched, i.e. each Si is, through O atoms, in  
contact with 4 other Si; when the ratio O:Si increases, the  
no. of branches decreases, and at O:Si = 3 each Si is,  
through O atoms, in contact with only 2 other Si. The  
Si-O bonds are more elastic than those between the Si-O  
chain and the metal cations. Orientation of the  $\text{O}_2\text{SiO}_2$   
chains may be responsible for the peculiarities of glass fila-  
ments.

J. J. Bikerman

7-13-54

SAVITSKAYA, Ya. S.

1938. The specific heat and structure of silicate glasses. — V. V. TARASOV and Ya. S. SAVITSKAYA (*C.R. Acad. Sci. U.R.S.S.*, 88, 1019, 1953). A physico-chemical study of the lattice structure of silicate glasses. Assuming that the O:Si ratio determines the lattice structure of silicate glasses, the authors investigated the structure of a glass containing 50% mol  $\text{Na}_2\text{O}$  and 50% mol  $\text{SiO}_2$ , i.e. in a glass with O:Si=3. The method adopted was to treat the specific heat curves for  $\text{Na}_2\text{SiO}_3$  glass according to the authors' formula of the theory of specific heat of heterodynamic structures. The authors believe that investigations of the lattice structure of a  $\text{Na}_2\text{SiO}_3$  glass must be based on measurements of specific heat from 60° K. upwards. (2 figs., 1 table.)

SOV-109-3-6-26/27

AUTHORS: Savitskaya, Ya. S., Vikhlyayeva, R. P., Alpatova, N. M.

TITLE: An Interdepartmental Seminar on Cathode Electronics (7th Session) ((Mezhduvedomstvennyy seminar po katodnoy elektronike (7-e zasedaniye))

PERIODICAL: Radiotekhnika i Elektronika, 1958, Vol 3, Nr 6, p 854 (USSR)

ABSTRACT: On the 3rd February 1956 a Session of the Interdepartmental Seminar took place in the Institute of Radio Engineering and Electronics of the Soviet Academy of Sciences. During the meeting 6 lectures were delivered. A. A. Maklakov and Ye. P. Ostapchenko dealt with the new method of preparing barium and barium-calcium aluminates and tungstates. L. Ya. Smoktly presented the results of her work on the improvement of the processing of sintered cathodes. The lecture of R. M. Rybakova dealt with the investigation of oxide suspensions for directly heated cathodes. A. P. Iyevlev spoke of the production technology and the methods of control of a new barium getter. N. I. Ekvina considered the problem of application of the electro-osmosis for the investigation of the electro-phoresis of aluminum suspensions. The paper of

Card 1/2

SOV-109-3-6-26/27

An Interdepartmental Seminar on Cathode Electronics (7th Session)

Yu. N. Buznikov analysed the causes and the mechanism of the darkening of alundum coatings during the preparation and the operation of the electron tubes.

SUBMITTED: March 14, 1958

Card 2/2    1. Electron tubes -- USSR